REDACTED
FOR PUBLIC INSPECTION

STATE OF CALIFORNIA EDMUND G. BROWN JR., *Governor*

PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

August 6, 2018 **Via ECFS**

Marlene H. Dortch**,** Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Re: *Petition of USTelecom for Forbearance*, WC Docket No. 18-141

Dear Ms. Dortch:

This is the public, redacted version of the Comments of the California Public Utilities Commission in this proceeding. As set forth in the Protective Order governing this proceeding, the CPUC has marked one portion of its Comments "Highly Confidential." That portion of the CPUC's Comments refers to—but does not actually reveal—Highly Confidential material submitted by USTelecom in support of its Petition. The CPUC is therefore uncertain whether that portion of its Comments is properly kept confidential, but we are erring on the side of caution. Should this Commission determine that the CPUC's Comments do not fall within the terms of the Protective Order, we would be happy to resubmit the unredacted version of these Comments.

If you have any questions, please feel free to contact me by email at jk5@cpuc.ca.gov, or by phone at 415-703-2760.

Sincerely yours,

/s/ JONATHAN C. KOLTZ
Jonathan C. Koltz
Staff Counsel
California Public Utilities Commission

Enclosure(s)

JCK:tlg

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REDACTED FOR PUBLIC INSPECTION

BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554

In the Matter of:	
Petition of USTelecom for Forbearance Pursuant to 47 U.S.C. § 160(c)	WC Docket No. 18-141

COMMENTS OF THE CALIFORNIA PUBLIC UTILITIES COMMISSION

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August 6, 2018

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Introduction

The California Public Utilities Commission (CPUC or California) respectfully submits these comments concerning proposals in the USTelecom's Petition for Forbearance.[1] These comments address many, but not all, of the issues raised by USTelecom's Petition. Silence on any particular issue should not be construed as agreement or disagreement. And the CPUC reserves the right to comment further in the reply round.

USTelecom asks for broad—very broad—relief.[2] It asks the Federal Communications Commission (FCC or Commission) to forbear, under Section 10, from enforcing a swath of pro-competitive laws and regulations, against every Incumbent Local Exchange Carrier (ILEC) and Regional Bell Operating Company (RBOC) in the country, on a nationwide basis. Of particular concern, it seeks relief from Section 251(c)(3), which requires ILECS to provide Competitive Local Exchange Carriers (CLECs) access to the ILECs' unbundled network elements (UNEs), and from Section 251(c)(4), which requires ILECs to resell to other telecommunications providers at wholesale any service that they sell at retail.

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[1] *In the Matter of Petition of USTelecom for Forbearance Pursuant to 47 U.S.C. § 160(c)*, WC Docket 18-141 (filed May 4, 2018) (Petition).

[2] 47 CFR 51.319 provides a lengthy list of unbundling requirements, including, among other items: 1) local loops (includes all features, functions, and capabilities of such transmission facility, including the network interface device. It also includes all electronics, optronics, and intermediate devices (including repeaters and load coils) used to establish the transmission path to the end-user customer premises as well as any inside wire owned or controlled by the incumbent LEC that is part of that transmission path); 2) copper loops (including conditioning); 3) line splitting; 4) hybrid loops, including DS1 or DS3 capacity; and 5) maintenance, repair and testing.

It does so because, it claims, forbearance will free ILECs and RBOCs from "burdensome" regulations that have outlived their usefulness. This, in turn, will allow those entities to spend more money on infrastructure, so smoothing the transition from copper to fiber.[3] USTelecom also asserts that granting its petition will incentivize the CLECs who now rely on the ILECs' infrastructure to build out their own infrastructure, thereby promoting competition.

California supports initiatives that assist with the transition to fiber and that enhance competition. Despite USTelecom's claims, we see little evidence this Petition does either. In California at least, granting this petition in full risks further market consolidation into the hands of one or, at best, two companies. In our comments, we express the following concerns:

- Nationwide relief is inappropriate absent more thorough and independent analysis. The Commission must analyze USTelecom's petition market-by-market, similar to its analysis in the Business Data Services (BDS) proceeding.[4] Our analysis of California data should give the FCC reason to pause.

- CLECs in California that rely on UNEs have told us that the unavailability and/or price of inputs such as UNEs may make some California providers' unable to continue serving customers, and may ultimately cause them to exit the market.

[3] This is sometimes shorthanded as "the IP transition." As the Commission has recognized, however, there are "two distinct but related kinds of technology transitions: (1) changes in network *facilities*, and in particular, retirement of copper facilities; and (2) changes that involve the discontinuance, impairment, or reduction of legacy *services*, irrespective of the network facility used to deliver those services." *In re Technology Transitions*, 30 FCC Rcd 9372, 9375 ¶ 4 (2015). An all-IP multi-media network can use copper as its physical infrastructure, just as time-division multiplexing (TDM) circuit-switched voice services can run over fiber.

[4] *See Business Data Services in an Internet Protocol Environment*, Report and Order, 32 FCC Rcd 3459 (2017) (*BDS Order*).

- In the absence of independent analysis, we are not convinced that USTelecom's main assertion that markets for ILEC and RBOC offerings are "indisputably competitive" reflects the reality on the ground regarding the business voice and wholesale markets in California.

Our analysis of the California market stems from an in-depth 2016 investigation into competition in California,[5] a review of data ordered at the conclusion of that proceeding,[6] and an analysis of the most recently-available FCC Form 477 data.[7] This specific analysis of the California market is more granular than the generalities offered by USTelecom, which frequently are based an analysis at the national level or, worse yet, not backed by any analysis at all. USTelecom bears the burden of proof here. Given that USTelecom has not provided sufficient analysis, nor sufficiently explained what it has submitted, the organization has not shouldered that burden.

These comments should not be read to suggest that the effect on the market is the only concern this Petition raises. For example: the CPUC has a statutory responsibility to ensure that all Californians have reliable access to emergency services. This Petition, as written, does not address impacts to the 911 or emergency-services networks. The 911

[5] *Order Instituting Investigation Into the State of Competition Among Telecommunications Providers in California*, I.15-11-007 (Cal. P.U.C. Nov. 5, 2015) (Competition OII). The docket card for this proceeding is available on the CPUC's website at: https://apps.cpuc.ca.gov/apex/f?p=401:57:0::NO.

[6] *Decision Analyzing the California Telecommunications Market and Directing Staff to Continue Data Gathering, Monitoring, and Reporting on the Market,* D.16-12-025 (Cal. P.U.C. Dec. 1, 2016) (Competition Decision), *available at* http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M171/K031/171031953.pdf.

[7] State Commissions with jurisdiction over telecommunications are able to view the statewide total connection data included the Form 477 submissions. This data is treated as confidential. We do not know if this data is available to USTelecom.

network is highly dependent on CAMA trunks,[8] which in turn rely on copper facilities and TDM technology for serving approximately 450 California Public Safety Answering Points. Based on the Petition, the extent to which removing the UNE requirement, for example, might affect the 911 network availability or cost is unclear to California. And it appears equally unclear to one of USTelecom's principal members, AT&T, which told the California Office of Emergency Services: "AT&T is not able to determine the impact to 911 Service provided to the State until the FCC responds to the request by . . . USTelecom. AT&T will be in a better position to discuss the impact when/if the FCC issues an order that changes the regulations."[9] In addition to examining the impact granting this petition will have on competition, we request that the FCC also determine the specific impact granting this petition will have on the 911 network, including next generation 911.

Without significantly more development, the record only supports one conclusion: USTelecom's petition should be denied. As an alternative, USTelecom could narrow its forbearance request to specific markets that are sufficiently competitive to support forbearance, after assuring the Commission and the states that basic services will be unaffected.

[8] CAMA—Centralized Automated Message Accounting—trunks, are specialized trunks used for 911 connections. They are a type of in-band analog transmission protocol that transmits telephone numbers via multi-frequency encoding.

[9] Email from Susan Rodocker, AT&T, to Donna Peña and Ryan Sunahara, California Office of Emergency Services (July 13, 2018), *appended to these comments as* Attachment A.

Standard of Review

Under Section 10 of the Telecommunications Act of 1996, the Commission should forbear from applying any provision of the Act, or any of the Commission's regulations, if the Commission makes certain specified findings with respect to such provisions or regulations. Specifically, forbearance is warranted when (1) enforcement of the regulation is not necessary to ensure that charges and practices are just and reasonable, and are not unjustly or unreasonably discriminatory; (2) enforcement of the regulation is not necessary to protect consumers; and (3) forbearance is consistent with the public interest.[10] As part of the public interest inquiry, the Commission must also consider, under Section 10(b), "whether forbearance from enforcing the provision or regulation will promote competitive market conditions."[11] Relevant here, Section 10(d) specifies as well that "the Commission may not forbear from applying the requirements of section 251(c) or 271 . . . until it determines that those requirements have been fully implemented."[12]

Forbearance is not the default.[13] Rather, in a forbearance proceeding, "the burden of proof—encompassing the burdens of both production and persuasion—is on

[10] 47 U.S.C. § 160(a).

[11] 47 U.S.C. § 160(b).

[12] 47 U.S.C. § 160(d).

[13] *Qwest Corp. v. FCC*, 689 F.3d 1214, 1225 (10th Cir. 2014).

the petitioner."[14] Moreover, the "three prongs of § 10(a) are conjunctive."[15] Thus, the petitioner bears the burden of proving all three of the prongs.[16]

Discussion

In its petition, USTelecom asserts that the markets for ILEC and RBOC offerings are "indisputably competitive."[17] In support of its arguments, USTelecom points out that a number of households that continue to abandon ILEC POTS service are not switching to competitive alternatives that rely on UNEs or resale. Rather, they are relying for the most part on providers that use their own facilities or a broadband connection to deliver voice services to their customers. Thus, given the purportedly competitive market, USTelecom asserts later on that enforcement of unbundling and access requirements in Sections 251 and 252 are no longer necessary to ensure that charges and practices are just and reasonable.

In 2016 California conducted is own investigation into the State's telecommunications market. Between data obtained during that proceeding, data ordered at the conclusion of that proceeding, and analysis of FCC Form 477 data, we can offer a number of insights into the California market that the FCC should consider in determining whether USTelecom's assertion is correct. Ultimately, we believe that the

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[14] *Id.* at 1225-26 (citing *In re Petition to Establish Procedural Requirements to Govern Procedures for Forbearance Under Section 10 of the Communications Act of 1934, As Amended,* 24 FCC Rcd 9543, 9554-55, ¶ 20 (2009)).

[15] *Cellular Telecomms. & Internet Ass'n v. FCC,* 330 F.3d 502, 509 (D.C. Cir. 2003).

[16] *See id.*

[17] Petition at 7.

FCC should replicate California's analysis for all 50 states, or for specific markets within the 50 states, before deciding whether to grant all or part of USTelecom's petition.

The CPUC cannot determine if the confidential data provided by USTelecom on June 26 supports its petition. Nor can we determine whether it is a complete set of all the data that underlies the charts and tables within the petition. **[BEGIN HIGHLY CONFIDENTIAL]** [redacted] **[END HIGHLY CONFIDENTIAL]**[18] making it extremely difficult to duplicate the resulting charts and tables. USTelecom, in an ex parte communication that it noticed on June 15, 2018, responded to questions from FCC staff and apparently made clarifications related to some of the charts it provided, but the substance of those clarifications remains a mystery. Moreover, in other ex parte communications, USTelecom describes other sources of data that are not included in the data provided to the CPUC. Although we are unable to draw conclusions using the data USTelecom provided, the CPUC has more comprehensive California-specific data that raises some concerns about granting this petition.

I. Nationwide relief would be inappropriate; the Commission must consider market-specific data.

The CPUC is willing to grant that, perhaps, some of the relief USTelecom seeks is warranted in some markets. After all, one of the goals of the '96 Act was to establish

[18] We are uncertain whether this is truly confidential but, in an excess of caution, we are marking it so. If, upon review, counsel for USTelecom feels that this phrase does not reflect anything that falls within the protective order, we would be happy to remove the confidentiality designation.

"a pro-competitive, de-regulatory national policy framework."[19] Thus, in some markets, it is possible that competition has evolved to the point that UNEs are no longer necessary, or resale service offerings, or perhaps both. However, rather than provide a market-by-market analysis, USTelecom instead merely opines that all of the relief it seeks is appropriate everywhere, for everyone.

USTelecom writes: "A showing that the provisions at issue are 'outdated and harmful *as a general matter*' permits a finding that the requirements 'are *entirely* unnecessary in all geographic markets.'"[20] The quoted portions of that sentence come from an order disposing of one of USTelecom's earlier forbearance petitions.[21] As USTelecom fails to note, but as the *2015 USTelecom Forbearance Order* made clear, that was merely USTelecom's argument there, just as it is here.[22] USTelecom is trying to put its own words in the Commission's mouth.

Setting that aside, both the courts and this Commission have been rightly skeptical of attempts to "loftily abstract away all specific markets" when implementing the provisions of the '96 Act.[23] For example, in 2004 the D.C. Circuit considered a question that basically mirrors that which USTelecom now asks. Section 251(d)(2)'s

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[19] Joint Explanatory Statement of the Committee of Conference, S. Conf. Rep. No. 230, 104th Cong., 2d Sess. 113 (1996).

[20] Petition at 21-22.

[21] *In re Petition of USTelecom for Forbearance Pursuant to 47 U.S.C. § 160(c)*, 31 FCC Rcd 6157, 6164 ¶ 9 (2015) (*2015 USTelecom Forbearance Order*).

[22] *See id.* ("In contrast, USTelecom argues that the provisions at issue here are *entirely* unnecessary in all geographic markets because the changing communications landscape throughout the country has rendered them outmoded and harmful *as a general matter*.").

[23] *U.S. Telecom. Ass'n v. FCC*, 290 F.3 415, 423 (D.C. Cir. 2002) (*USTA I*).

impairment standard requires the Commission to limit the network elements subject to Section 251(c)(3) unbundling by "consider[ing], at a minimum, whether . . . the failure to provide access to such network elements would impair the ability of the telecommunications carrier seeking access to provide the services that it seeks to offer." The Commission presumed that all CLECs nationwide would be impaired if they lacked unbundled access to certain switches.[24] The D.C. Circuit found, however, that such a "national finding, without the possibility of market-specific exceptions . . ." was impermissibly broad, because the parties had presented the Commission with "narrower alternative[s] that [had] all of the same advantages and fewer disadvantages" than nationwide relief.[25]

Here, a narrower alternative is available: forbearance should be available only in those markets in which it is justified.[26] Elsewhere in its Petition, USTelecom seems to recognize the virtues of such an approach, touting, for example, the conclusion this Commission reached in its recent BDS Order. According to USTelecom,

> [u]sing its *extraordinarily granular dataset*, the Commission fashioned a new regulatory regime that was *tailored precisely* to today's competitive realities. This new regulatory framework uses a "competitive market test" to identify *counties* in which BDS competition has taken hold.

[24] *See U.S. Telecom Ass'n v. FCC*, 359 F.3d 554, 564 (D.C. Cir. 2004) (*USTA II*).

[25] *Id.* at 569, 571.

[26] *See, e.g.*, *In re Review of Regulatory Requirements for Incumbent LEC Broadband Telecommunications Services*, 17 FCC Rcd. 27000, 27022 (2002) (Copps & Adelstein, Commrs., concurring) (recognizing that it would be "vastly preferable" to forbear "only in those markets in which [the Commission] had first determined that the carrier does not exercise market power").

> *In counties that do not pass the test*, the Commission retained price cap regulation . . . .[27]

The CPUC agrees with USTelecom: such a focused approach is best, allowing the Commission to proceed on a market-by-market basis. It is therefore more than a little surprising that USTelecom now asks for sweeping relief based on the limited aggregate data it has submitted.

California, however, has data that are considerably more precise than the aggregate data offered by USTelecom. And the California-specific data show that, in California, forbearance is not warranted.

II. The residential voice services market in California is moderately concentrated, but the underlying network supporting many communications services is in the hands of one or two companies.

Most California residents have two wires into their house: (1) a local loop built by the local telephone system, largely during the era of cost-of-service rate regulation; and (2) a coaxial cable connection built by the cable company for cable television transmission, which began to be used in the late 1990s for two-way voice and broadband communication. In relatively rare instances, a third provider will run a third wireline connection to the home.[28] California's communications markets are changing, however, as customers embrace new technologies from old and new providers. Besides new services and devices, many households which had previously subscribed to multiple communications services from unaffiliated individual providers can now consolidate

[27] Petition at 15 (emphasis added).

[28] Competition Decision, *supra* n.6, at 62.

these separate services into provider-offered bundles or localize them onto a single wireless device.

Chart 1, below, shows the trends in the number of communications subscriptions by technology type. This cumulative total comprises the market (as reported by carriers) for communications services delivered to residences, businesses and institutions, and reflects that subscribers often rely on multiple communications technologies. Traditional wireline telephone service is shrinking in absolute terms and relative to the total subscriptions market, though the underlying infrastructure supporting traditional wireline voice is the same for some broadband services (DSL and variants). Subscribership to traditional voice services is declining, as subscriptions to other services are increasing. Subscribership for mobile broadband services has increased dramatically, while fixed broadband service subscribership continues to increase, though at a much slower rate. Thus, some of what USTelecom says is true: the market has evolved, and wireless telecommunications subscriptions, specifically mobile subscriptions, now dominate the market.

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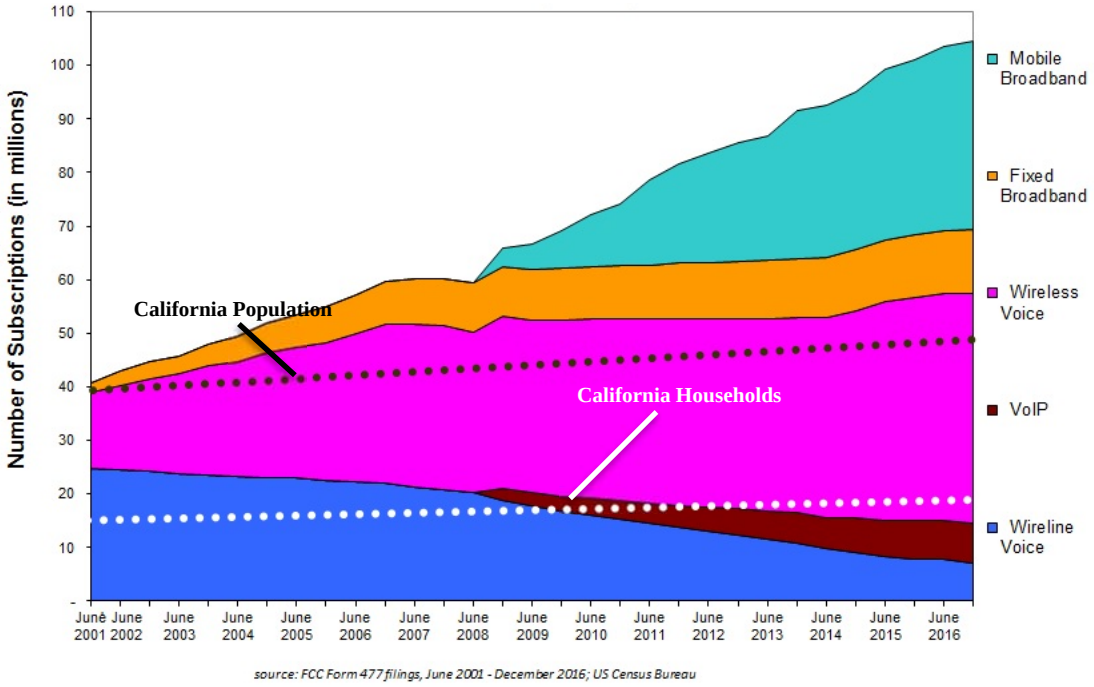
Chart 1: Subscribership Trend of Communications Services in California by Technology June 2001-December 2016 (in Millions of Subscription)



During our 2016 investigation into the state of competition in the California telecommunications market, we found that eighty-seven percent of California households live in census blocks with six or more residential voice providers: generally the ILEC, a cable provider that also offers VoIP services, and the four largest mobile providers.[29] Additionally, we conducted a Herfindahl-Hirschman Index (HHI) analysis,[30] finding that,

[29] Competition Decision, *supra* n.6, at 75.

[30] The Herfindahl–Hirschman Index, a commonly accepted measure of market concentration, is calculated by squaring the market share of each firm competing in the market and then summing the resulting numbers. For example, for a market consisting of four firms with shares of 30, 30, 20, and 20 percent, the HHI is 2,600 (302 + 302 + 202 + 202 = 2,600).

The HHI takes into account the relative size distribution of the firms in a market. It approaches zero when a market is occupied by a large number of firms of relatively equal size and reaches its maximum of 10,000 points when a market is controlled by a single firm. The HHI increases both as the number of firms in the market decreases and as the disparity in size between those firms' increases.

as noted in Table 1, below, that the six largest residential voice markets in California (Los Angeles, Sacramento, San Francisco, San Jose, San Diego and Oakland) all are moderately concentrated.[31]

Table 1. Concentration in Largest Intermodal Residential Voice Services Markets[32]

Market	HHI	Concentration Level
Los Angeles	1,555	Moderate
Oakland	1,712	Moderate
Sacramento	1,727	Moderate
San Diego	1,907	Moderate
San Francisco	1,860	Moderate
San Jose	1,784	Moderate

While moderate concentration in one specific market sector would not be sufficient to question US Telecom's assertion regarding competitiveness, our

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The agencies generally consider markets in which the HHI is between 1,500 and 2,500 points to be moderately concentrated, and consider markets in which the HHI is in excess of 2,500 points to be highly concentrated. *See* U.S. Dep't of Justice & Fed. Trade Comm'n, Horizontal Merger Guidelines § 5.2 (2010), *available at* https://www.justice.gov/sites/default/files/atr/legacy/2010/08/19/hmg-2010.pdf. Transactions that increase the HHI by more than 200 points in highly concentrated markets are presumed likely to enhance market power under the Horizontal Merger Guidelines issued by the Department of Justice and the Federal Trade Commission.

[31] Competition Decision, *supra* n.6, at 78-79.

[32] Note that since the service territories of cable providers and ILECs do not overlap at the address level (though they may at the census block level), we adjusted our calculations to treat all cable subscribers are customers of one entity (i.e. a Charter customer or a Comcast customer was a "cable" customer) and all ILEC subscribers as customers of one entity (i.e. a customer of AT&T California or Frontier was an "ILEC customer"). Additionally, this table represents a "persons served" HHI. The number of landlines for each landline carrier was multiplied by the average number of people over the age of 10 per household in the county to determine how many people each landline might serve.

investigation into the state of competition in California also included analysis of confidential data detailing how telecommunications companies provide service (using their own facilities or purchasing facilities from another provider). Our investigation also included a review of confidential data pursuant to data requests of facilities-based providers in California. We surveyed residential wireline voice lines, business lines, and backhaul provided to cell sites. Our review found the following:

- The largest voice providers (both the large ILECs and the large cable companies offering VoIP service) almost exclusively operate their residential services using their own facilities.
- Of the three non-cable CLECs offering residential services, less than 10 percent of those connections are self-provisioned. Of the six respondents providing business voice services, roughly 11 percent of connections were self-provisioned.
- At a statewide level, the mobile wireless backhaul market is highly concentrated in three firms—with one legacy carrier, far outweighing the other two combined. This lead firm accounts for significantly over half of cell site backhaul for the big four wireless carriers. The second largest firm accounts for a little less than 15 percent of cell site backhaul, and the third largest firm accounts for a slightly less than 10 percent of cell site backhaul.[33]

Thus we are left with a market where most CLECs that are not large cable providers, as well as the large mobile providers, rely predominantly on the network infrastructure of one company. At least in California, the markets are not "indisputably competitive."

While the 2016 investigation did not focus significantly on UNE usage, we have now performed that analysis using Form 477 data for California. USTelecom asserts in its Petition that there are fewer than half as many UNE loops in use today as in 2005,

[33] Competition Decision, *supra* n.6, at 108.

even as the number of non-ILEC connections has grown rapidly.[34] While that technically may be a true statement, it also may mislead someone unfamiliar with the history of the telecommunications industry to conclude that UNE usage has consistently declined over the years. Rather, it declined only after the FCC's February 2005 Triennial Review Remand Order, in which the FCC released ILECs from the requirement to provide UNE-platform (UNE-P) at regulated rates.[35] Testimony provided by AT&T during our 2016 investigation makes clear there was a steep decline in overall UNE usage in California in 2005. However, beginning in 2006, UNE usage stabilized, and in some cases increased, because competitive carriers continued to rely on UNE loops. In 2016, AT&T testified to the CPUC that "AT&T California supplies more UNE loops today than it did in 2006."[36] Table 1, below, made using Form 477 data, confirms more UNEs were used in 2016 than in 2014.

Table 2. Total UNEs Used in California 2014-2016

	2014	**2015**	**2016**
Total UNEs Used	279,704	249,702	284,828

Additionally, subscribership of companies in California relying on UNEs has increased. As noted in Table 2 below, in California overall subscribers of the companies

[34] Petition at iii.

[35] *In the Matter of Unbundled Access to Network Elements, Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers*, Order on Remand, 20 FCC Rcd 2533, 2536 ¶ 5 (2005).

[36] Dr. Debra Aron, Testimony on behalf of AT&T California in I.15-11-007 at 38 (June 1, 2015), *on file with author*.

relying on UNEs has increased during the last three years. The table shows that this increase is due to the number of business voice connections, even while residential voice connections have declined.

Table 3. California Voice Lines Delivered Using UNEs in 2014-2016

	2014		2015		2016	
	Residential Connections	Business Connections	Residential Connections	Business Connections	Residential Connections	Business Connections
Non CA ILEC or Cable UNE Users	**91,683**	**662,187**	**64,742**	**648,359**	**68,342**	**761,272**
Total Statewide Wireline Voice Connection	**3,610,094**	**5,563,827**	**2,944,698**	**4,943,228**	**2,397,884**	**4,593,045**
Market Share for Non CA ILEC or Cable UNE Users	**2.54%**	**11.90%**	**2.20%**	**13.12%**	**2.85%**	**16.57%**

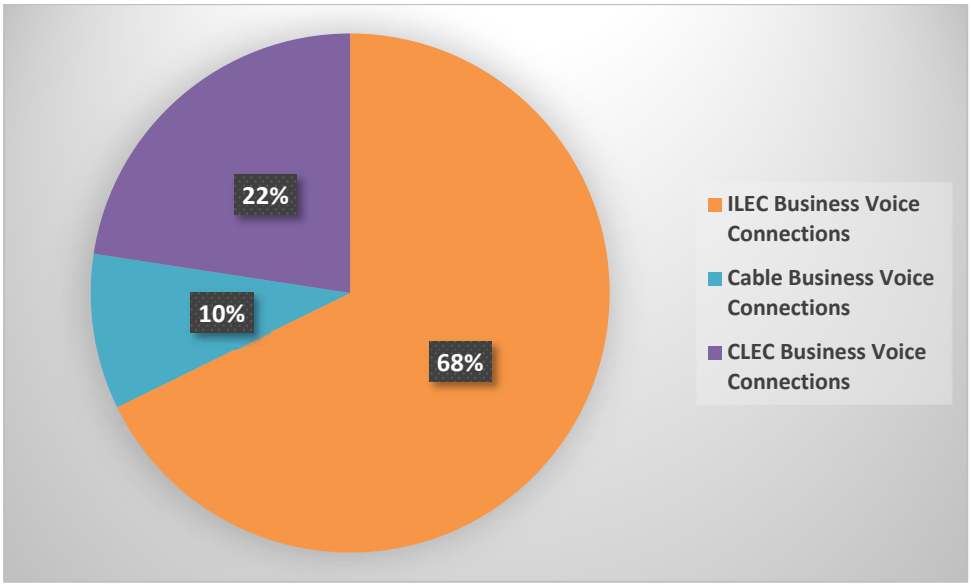
Our 2016 investigation found that two companies provided service to over half of the total number of business subscriptions statewide. Statewide, there were nearly 6.4 million mobile business connections in California, along with approximately 6.2 million business wireline connections.[37] Eleven companies in California had more than 200,000 business voice subscribers.

This data shows that for most business customers, in many locations in the state, there likely will be the following choices in business voice service: 1) AT&T or Frontier; 2) a cable provider (Comcast, Charter or Cox); 3) one of the "big four" mobile voice providers, where available; and 4) a CLEC specializing in business voice service (e.g., CenturyLink/Level 3, Telepacific or Granite) that relies on UNEs to provide its service. At first blush, it may seem like there are plenty of competitive options in this market. However, those options begin to decrease after closer inspection.

[37] Competition Decision, *supra* n.6, at 82. Note that for the FCC, measuring a relevant trend regarding the number of total business voice service connections may be challenging because mobile providers are not asked to separate residential and business subscribers on their Form 477 data submissions.

First, cable providers may not have the same capability to serve business customers as the ILEC. Our understanding from at least one cable provider is that those companies are not nearly as well positioned to compete for retail business services as they are in the residential market, because their networks do not extend to connect with as many business end-users as the ILECs.[38] This limitation was demonstrated by the numbers, shown in Chart 2, below: the two largest ILECs provided approximately 4.2 million wireline business connections, the largest CLECs provided approximately 1.4 million business connections, while cable companies provided approximately 600,000 connections.[39]

Chart 2. Breakdown of Business Voice Connections



[38] *See* Competition Decision, *supra* n.6, at 81; *see also* Joseph Gillan, Testimony on behalf of Cox California Telecommunications, in I.15-11-007, at 22 (June 1, 2016) ("Cable-based companies began as fundamentally consumer organizations, and even with their expansion into retail and wholesale business services, have a long-familiarity of marketing and provisioning to the residential market."), *on file with author*.

[39] Competition Decision, *supra* n.6, at 82.

Second, based on the data we have, we cannot conclude that mobile business voice service is a substitute for wireline business voice service. Because mobile voice providers are not required to separate residential and business voice connections, we lack a trend for the 6.4 million wireless business connections reported in our 2016 investigation. Additionally, we lack any context regarding these connections, as our investigation did not indicate if these connections are substitutes for wireline subscriptions or additive. We can note, however, that removing mobile telephony from the assessment shows that the business wireline market is highly concentrated, with one carrier providing over half the total business landlines.[40]

The information above shows that, if the FCC grants this petition, and CLECs offering business voice services exit the market as a result, California could be left with one dominant provider in business voice, mobile backhaul, and other wholesale services.

USTelecom has not borne its burden of producing data demonstrating that the nationwide relief it seeks is appropriate; the CPUC believes that the FCC should simply deny the petition on that basis. Nevertheless, should the FCC decide that more analysis is appropriate, the FCC should determine, based on independent, granular data, that granting this petition would not drive smaller competitors out of the market, thereby reducing competition. As a threshold question, the FCC ought to determine whether market alternatives to UNE loops exist anywhere, and it then can determine their availability on a market by market basis.

[40] Competition Decision, *supra* n.6, at 84.

III. Alternatives to UNEs are limited.

As stated earlier, most competitive carriers in California provide residential or business voice services using the facilities of another provider, most commonly an ILEC. Thus, if the FCC wants these businesses to continue operating in the market, it needs to evaluate whether or not CLECs have other alternatives.

In 2016, we found that competitive carriers depend on the legacy companies for wholesale inputs, including last-mile or "local loop" access, middle mile or other dedicated special access transport, pole attachments and/or conduit access and, for the wireless carriers, spectrum.[41] With very few exceptions, CLECs simply cannot build a network from the ground up. Additionally, cable companies are not a substitute, as they do not reach as many business end-users as do the ILECs, and are not subject to the same unbundling requirements as are the legacy telephone companies.

A complaint filed with the Commission last year illustrates this point. Granite Telecommunications, a CLEC offering business voice services in California and several other states, asserted: "No provider other than the ILEC in its home territory has the physical infrastructure in place to provide voice services to and from every business location . . . . Granite cannot operate effectively in California without access to AT&T's network."[42] Granite estimated that the ILEC is the only facilities-based provider in 60 to 85 percent of Granite's customer locations. Additionally, Granite asserted that "[n]either

[41] Competition Decision, *supra* n.6, at 98.

[42] *Granite Telecomms., LLC, v. Pac. Bell Tel. Co.*, C.17-08-020, at 4 (Cal. P.U.C. Aug. 8, 2017), *available at* http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M194/K602/194602500.PDF.

cable nor fiber in general is economically feasible [for Granite to build] at the vast majority of Granite's customers' locations and wireless services lack the necessary features and functionality to serve as a replacement."[43]

The FCC should analyze whether ILECs offer other wholesale platform services that could be substitutes for UNE offerings in both the residential and the business market. According to testimony provided during our 2016 investigation, higher-priced ILEC special access is the most common option that competitive carriers (including cable companies) use when access to UNE transport is foreclosed.[44] Several member companies of the California Association of Competitive Telecommunications Companies (CALTEL) have filed comments with the FCC stating that they primarily rely on commercial platform services (Local Wholesale Complete from AT&T, and Wholesale Advantage from Frontier) to serve multi-location business customers.[45] Other CALTEL members occasionally purchase platform services to fill in coverage gaps for multi-location customers that are primarily served using their network assets combined with other last-mile facilities (UNE loops, BDS circuits, or self-provisioned loops). CLECs do not use platform services to serve residential customers because the price set by the ILEC would make it unprofitable to offer service.[46]

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[43] *Id.* at 12 n.6.

[44] Reply Brief of Cal. Ass'n of Competitive Telecomms. Cos., in I.15-11-007, at 8 (Cal. P.U.C. Aug. 26, 2016), *available at* http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M167/K737/167737528.PDF.

[45] *Id.* at 10.

[46] *Id.*

If a CLEC cannot obtain a comparable wholesale offering from the ILEC, as a result of the FCC granting this petition, and cannot anticipate a similar offering from the cable provider, the CLEC is faced with a choice: exit the market or build its own network by purchasing transport or other wholesale services from another provider.

IV. In some locations, it may be theoretically possible to build a new network to replace UNEs—but it would be very expensive.

The CPUC also examined where a CLEC may be able to build its own network and under what circumstances. If the CLEC has sufficient funds to cover the significant capital investment, the option to build might be feasible in dense urban areas or along the main long-haul transport routes.[47] However, it is much less feasible elsewhere.

Public Utilities Code Section 716 requires the CPUC respond to a petition filed by an incumbent local exchange carrier requesting that the FCC "forbear from enforcing that carrier's duty to provide to any requesting telecommunications carrier, nondiscriminatory access to network elements on an unbundled basis at any technically feasible point on rates, terms, and conditions that are just, reasonable, and nondiscriminatory . . . within any metropolitan statistical area located in the state." In particular, the CPUC shall provide "data on competition in the metropolitan statistical area that is the subject of the

[47] The U.S. Justice Department has identified the following routes: Los Angeles to Las Vegas, Sacramento to Salt Lake City, Sacramento to San Francisco, San Diego to Phoenix, and San Francisco to Los Angeles. *See United States v. CenturyLink, Inc.*, No. 1:17-cv-2028-KBJ, at 10 (D.D.C. Oct. 2, 2017), *available at* https://www.justice.gov/atr/case-document/file/1001611/download.

petition" including separate data on competitive options for residential, business, and wholesale services.[48]

In anticipation of this type of proceeding, the CPUC in its 2016 competition proceeding asked all communications providers to submit the locations of where other providers can readily connect with their network: the so-called "middle mile interconnection access locations" or "access points."[49] Eighty-six percent of all middle mile interconnection access locations submitted by providers in California are located in urban census blocks. While 37 providers reported owning at least one middle mile interconnection or network wholesale access location in California (where another provider could access its network), about 90 percent of those locations are owned by five providers. Table 3, below breaks these access points down by county. Twenty counties in California have at least six providers, including ILECs, that own access points.

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[48] Cal. Pub. Util. Code § 716.

[49] Examples include: central offices, switches, cable head ends (aggregation points), meet points, points of presence, data centers where carriers collocate, carrier hotels, mobile telephone switching offices, mobile base stations and other functionally comparable infrastructure that enables other services providers to connect with your network through wholesale services or peering arrangements.

Table 4. Number of Providers in California With Network Access Points by County

Counties[50]	**Number of Providers With potential connection locations, including ILECs**
Los Angeles, Orange, Sacramento	10 or more
Fresno, San Joaquin, Alameda, Placer, Riverside, San Bernardino, San Diego, Santa Clara, Siskiyou, Humboldt, Kern, Shasta, Yolo, San Francisco, San Luis Obispo, Tulare, Ventura	6-9
Madera, Merced, Modoc, Nevada, San Mateo, Santa Barbara, Sonoma, Calaveras, Colusa, El Dorado, Kings, Monterrey, Plumas, San Benito, Solano, Stanislaus, Tehama, Trinity	4 or 5
Amador, Butte, Contra Costa, Del Norte, Imperial, Lake, Lassen, Mendocino, Sutter, Tuolumne, Glenn, Inyo, Marin, Mono, Napa, Sierra, Yuba, Alpine, Mariposa, Santa Cruz	3 or less

In its BDS proceeding, the FCC looked at the availability of slower services (e.g., DS1, DS3) by county, concluding that the following counties in California did not have competitive markets for those products: Alpine, Amador, Calaveras, Colusa, Humboldt, Inyo, Lassen, Mariposa, Mendocino, Modoc, Mono, Nevada, Plumas, Sierra and Trinity.[51] If the FCC found the markets in these counties were not competitive for slower data services, it seems likely that it would make a similar assessment in the case of wholesale voice offerings. With the exception of Humboldt, all counties on the FCC's list also appear in Table 3, above, with five or fewer providers. Thus, in the current

[50] We compared availability at the county level, instead of Metropolitan Statistical Area (MSA) to allow for a cleaner comparison than some more granular areas (census block, census tract, wire center region, etc.), though it also risks overestimating availability because a provider may not serve the entire county. Showing this data at the MSA level would increase that overstatement.

[51] BDS Order *supra* n. 4 at ¶ 83. The FCC later released the all counties deemed "non-competitive." In California that included the following counties: Alpine, Amador, Calaveras, Colusa, Humboldt, Inyo, Lassen, Mariposa, Mendocino, Modoc, Mono, Nevada, Plumas, Sierra and Trinity.

environment, some CLECs might be able to obtain some type of wholesale service to replace the product offered by the ILEC. However, we question how common those instances will be if the FCC grants this petition.

While it certainly is possible that the ILECs can and will continue to provide wholesale services if it is in their financial interest to do so, both the CPUC and the FCC are aware of numerous accusations of ILECs resisting interconnection.[52] Further, AT&T has made it very clear that it intends to limit IP interconnection to a relatively small number of locations nationwide, perhaps a few as 13.[53] Thus it seems to consider the options a CLEC will have it is unable to use an ILEC's network. Table 4, below, shows the same data in Table 3, above, except that it excludes all network access points owned by either AT&T or Frontier, the two large ILECs in California. The loss of those options dramatically impacts many counties in California.

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[52] For example, in *Connect America Fund, et al*., WC Docket No. 10-90; GN Docket No. 09-51; WC Docket No. 07-135; WC Docket No. 05-337; CC Docket No. 01-92; CC Docket No. 96-45; WC Docket No. 03-109, Ex-parte presentation of Cablevision, Attachment 1: "Record of Evidence of Resistance of ILECs to IP Interconnection," October 20, 2011. Cabelvision's filing included a table of the following providers alleging that ILECs have refused IP Interconnection: Cablevision Systems Corporation, Charter Communications, COMPTEL, EarthLink, PAETEC, Sprint Nextel Corporation, TW Telecom, Integra Telecom, Cbeyond, RCA-The Competitive Carriers Association, MetroPCS Communications, O1 Communications, Vaya Telecom, RCN Telecom Services, Telepacific, TDS Metrocom, and XO Communications.

[53] *Technology Transitions Policy Task Force*, Gen. Docket No. 13-5, *Numbering Policies for Modern Communications*, WC Docket No. 13-97, *Connect America Fund*; *A National Broadband Plan for Our Future*, WC Docket No. 10-90, Ex-parte presentation of AT&T, slide 11, January 24, 2014.

Table 5. Number of Providers in California With Network Access Points by County, Excluding AT&T and Frontier

Counties	Number of Providers With Access Points
Los Angeles	10 or more
Orange, Sacramento, Alameda, Fresno, San Diego, San Joaquin, Placer, Riverside, San Bernardino, Santa Clara, Siskiyou	6-9
Humboldt, Kern, Modoc, San Francisco, Shasta, Yolo, Madera, Nevada, San Luis Obispo, San Mateo, Tulare, Ventura	4 or 5
Calaveras, El Dorado, Lassen, Merced, Monterey, San Benito, Santa Barbara, Sonoma, Tehama, Amador, Butte, Colusa, Contra Costa, Del Norte, Imperial, Kings, Lake, Mendocino, Mono, Plumas, Solano, Stanislaus, Sutter, Trinity, Glenn, Inyo, Napa, Sierra, Tuolumne, Yuba	1-3
Alpine, Marin, Mariposa, Santa Cruz	0

Excluding facilities from Frontier and AT&T increases the number of counties with three or fewer providers from 20 to 34, including four counties that have no other providers. Some CLECs may be able to obtain some type of wholesale service to replace the service offered by the ILEC, but that option is likely infeasible for many others if the companies cannot afford the capital expenses of building a new network.

In 2016, the CPUC found that none of the competitive carriers in California would be able to build their own networks.[54] While a few companies now appear to have the means to build out facilities in very limited situations,[55] the overwhelming majority still do not. The FCC has previously estimated that costs for new fiber construction[56] ranges from $11,000 to $24,000 per mile for aerial construction, and from $25,000 to $165,000

[54] Competition Decision, *supra* n.6, at 98.

[55] For example, Sonic. See Press Release, Sonic, Sonic Announces Continued Expansion of Gigabit Fiber Network in San Francisco Metro Area, (May 1, 2017), *available at* http://www.marketwired.com/press-release/sonic-announces-continued-expansion-gigabit-fiber-network-san-francisco-metro-area-2213041.htm.

[56] We assume these companies would continue their existing wireline models, but would build fiber infrastructure, not copper.

per mile for buried construction.[57] In areas in California with difficult terrain, the cost can be more than $1,000,000 per mile.[58] Construction outlays depend significantly on costs incurred for access to conduit, ducts, poles and rights-of-way on public and private lands, with the expense of obtaining permits and leasing pole attachments and rights-of-way amounting to 20 percent of the cost of fiber optic deployment.[59] And there are additional costs on the business voice side: CALTEL testified that in the business voice market, the preference for TDM instead of fixed interconnected VoIP technology is usually rooted in sunk-cost investments in legacy Customer Premises Equipment (CPE) and the cost to upgrade to new equipment.[60]

Based on the information provided above, we conclude that some CLECs that have the financing and construction ability to build their own networks may be able to do so in Los Angeles, San Francisco and similarly-situated counties; however, CLECs operating in Marin, Napa, Sonoma, San Mateo or Santa Barbara and other similarly-situated counties have fewer alternatives to assist in building their own networks. CLECs

[57] FCC, Connecting America: The National Broadband Plan, at 136-139, *available at* https://transition.fcc.gov/national-broadband-plan/national-broadband-plan.pdf.

[58] *See Resolution Conditionally Approving Additional CASF Funding of up to $9,928,715 to the California Broadband Cooperative to Complete the Digital 395 Project*, Res. T-17408 (Cal. P.U.C. Sept. 5, 2013), *available at* http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M076/K776/76776040.PDF. The fiber route from the main Digital 395 trunk to June Lake in Mono County cost $1,069,731, or roughly $140 per foot, to bore through 5,500 feet of rock.

[59] FCC, *Connecting America: The National Broadband Plan*, at 109.

[60] Opening Brief of CALTEL in I.15-11-007, at 10 (Cal. P.U.C. Aug. 12, 2016), *available at* http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M166/K502/166502282.PDF.

unable to obtain a wholesale product to replace their lost UNEs, or that cannot afford to build their own networks, will be forced to exit the market.

Conclusion

The CPUC appreciates this opportunity to provide comments to the FCC on USTelecom's Petition. We support initiatives that assist with the transition to fiber and that enhance competition but see little evidence this Petition does either. In some markets, perhaps competition has evolved to the point that UNEs are no longer necessary. We conclude that some CLECs in California may have the financial means and construction ability to make network builds in Los Angeles, San Francisco and other dense urban areas, or those along the main long-haul transport routes. Those companies may need time to transition to another wholesale supplier, but they are likely to survive. CLECs lacking the financial wherewithal, or lacking other options will no longer be in business.

Granting USTelecom's general, nationwide forbearance, especially when it has not provided additional details, and absent additional independent analysis, risks further market consolidation of the California market into the hands of one or, at best, two companies. The fact that granting this petition could have one dominant provider in business voice, mobile backhaul, and other wholesale services in California makes it clear that this is not in the public interest. Fewer choices are not in the interest of the 68,342 residential subscribers and 761,272 business connections in California that rely on UNEs.

Rather than provide a market-by-market analysis, USTelecom instead asserts that its broad request for nationwide relief is appropriate. This assertion alone, along with the limited data provided by USTelecom, does not meet the burden of proof. Further, based on our analysis, we specifically find that granting this petition risks harming the California market, as it likely would have one dominant provider in business voice, mobile backhaul, and other wholesale services in California. Because we believe this petition is not in the public interest, the CPUC requests that the FCC deny it, or require the petitioner to narrow its focus so that it meets the forbearance criteria. Alternatively, we ask the FCC to conduct a much more granular analysis than that provided by USTelecom, to determine the market alternatives to UNE loops, similar to how it conducted its BDS proceeding (market-by-market), or as we did in California.

Respectfully submitted,

/s/ JONATHAN KOLTZ
Jonathan Koltz
Attorney

California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102
Telephone: 415-703-2760
E-mail: jk5@cpuc.ca.gov

August 6, 2018

ATTACHMENT A

From:	Eckersley, Karen
To:	Koltz, Jonathan
Subject:	Original email AT&T
Date:	Friday, July 27, 2018 3:03:12 PM

Karen Eckersley
Communications Division
415.703.2778, M 415.265.0632

From: Pena, Donna@CalOES <Donna.Pena@CalOES.ca.gov>
Sent: Friday, July 27, 2018 2:36 PM
To: Eckersley, Karen <Karen.Eckersley@cpuc.ca.gov>
Cc: Sunahara, Ryan@CalOES <Ryan.Sunahara@CalOES.ca.gov>
Subject: FW: CA911: ILEC answers regarding FCC 19-141 USTelecom Forbearance (AT&T letter response 7-13-2018)

Karen,

Here is the actual response from AT&T that was extracted for the previous email to you.

Donna Peña

From: RODOCKER, SUSAN M <SR376J@att.com>
Sent: Friday, July 13, 2018 7:47 AM
To: Pena, Donna@CalOES <Donna.Pena@CalOES.ca.gov>; markneinast@sbcglobal.net
Cc: Sunahara, Ryan@CalOES <Ryan.Sunahara@CalOES.ca.gov>; WANG, HENRY C <hw3126@att.com>; HOLLAND, JONATHAN D <JH2419@att.com>
Subject: RE: CA911: ILEC answers regarding FCC 19-141 USTelecom Forbearance (AT&T)

Donna,
My apologizes I had thought a response had been sent.

AT&T is not able to determine the impact to 911 Service provided to the State until the FCC responds to the request by the USTelcom. AT&T will be in a better position to discuss the impact when/if the FCC issues an order that changes the regulations.

If you would like to discuss further please let me know. I will be OOO next week however Mark Neinast is able to address any questions or concerns you may want to address.

Again, my apologizes for the oversight in not getting this to you sooner.

Thanks,

Susan

Susan Rodocker
sr376j@att.com
Office: (469) 215-4819

From: Pena, Donna@CalOES <Donna.Pena@CalOES.ca.gov>
Sent: Thursday, July 12, 2018 5:38 PM
To: RODOCKER, SUSAN M <SR376J@att.com>
Cc: Sunahara, Ryan@CalOES <Ryan.Sunahara@CalOES.ca.gov>; WANG, HENRY C <hw3126@att.com>; HOLLAND, JONATHAN D <JH2419@att.com>
Subject: RE: CA911: ILEC answers regarding FCC 19-141 USTelecom Forbearance (AT&T)

Susan,

When can answers be expected?

Donna Peña

From: HOLLAND, JONATHAN D <JH2419@att.com>
Sent: Wednesday, June 27, 2018 5:44 PM
To: Pena, Donna@CalOES <Donna.Pena@CalOES.ca.gov>; RODOCKER, SUSAN M <SR376J@att.com>
Cc: pam.snyder@ftr.com; Sunahara, Ryan@CalOES <Ryan.Sunahara@CalOES.ca.gov>; WANG, HENRY C <hw3126@att.com>
Subject: Re: CA911: ILEC answers regarding FCC 19-141 USTelecom Forbearance requested by July 6, 2018

Susan: can you review this with Mark and get back to the State? I'm starting vacation tomorrow. Thank you in advance.

On Jun 27, 2018, at 5:32 PM, Pena, Donna@CalOES <Donna.Pena@CalOES.ca.gov> wrote:

> Jonathon (AT&T)
> Pam (Frontier)
>
> The CA 911 Branch would like to know if the recent USTelecom Petition for Forbearance impacts the availability or costs for any 9-1-1 circuits or services in California by your respective company. If this is beyond your scope, please forward to the appropriate individual to get answers for the connections below or any other relevant expenses for 9-1-1 in California.
>
> S/R to PSAP
> S/R to S/R
> CLECs to S/R
> ILECs to S/R
> ALI Frame Relay (ATT)
> ALI IP (Frontier)

Dial back up to PSAPs

Can you provide answers by July 6, 2018? If not, please reply as to when answers can be expected. Replies to this email may be used for budget and regulation discussions with, but not limited to, the FCC, CPUC, and the CA 911 Advisory Board.

The FCC reference is WC Docket No. 18-141: Petition of USTelecom for Forbearance Pursuant to 47 U.S.C. § 160(c) to Accelerate Investment in Broadband and Next-Generation Networks.

https://www.ustelecom.org/sites/default/files/documents/USTelecom%20Forbearance%20Petition.pdf

https://docs.fcc.gov/public/attachments/DA-18-574A1.pdf

Donna Peña, PMP, ENP
Telecommunications Engineer

California 911 - Program Development Division
Governor's Office of Emergency Services (CalOES)
601 Sequoia Pacific Blvd. MS-911, Sacramento, CA 95811
Phone: 916-657-6116

NEW E-mail: donna.pena@caloes.ca.gov
NEW Website: http://www.caloes.ca.gov/For-Governments-Tribal/Public-Safety/CA-9-1-1-Emergency-Communications-Branch

<image001.jpg> <image002.jpg> <image003.jpg>